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SOUTH PROPOSES FEDERALLY FUNDED PROGRAM FOR MURRAY RIVER

Canberra THE AUSTRALIAN in English 1 Jul 81 p 1

[Article by Peter Blunden]

[Text] A \$400 million federally-financed project should be undertaken to save the beleaguered River Murray, the South Australian Government proposed yesterday.

It said the Federal, NSW, Victorian and South Australian Governments should combine to provide a permanent solution to the growing salinity threatening the country's most important river system.

The move comes after months of bitter wrangling between the States, triggered by deteriorating water quality in the river.

Experts claim that unless swift and unified action is taken, the water in parts of the river, particularly its lower reaches, will become unfit for human consumption.

The South Australian Premier, Mr Tonkin, and his Minister for Water Resources, Mr Arnold, appealed to the Federal Government to consult the three States to negotiate a River Murray salinity mitigation package.

Their proposal seeks an investment by the Federal Government of \$50 million in providing grants for two critical salinity mitigation works—the Lake Tyrell scheme and the Kerang region de-watering scheme.

The Lake Tyrell scheme to divert 90,000 tonnes of salt to evaporation basins every year has been deferred by the Victorian Government which, however, is going ahead with the Kerang plan to divert 16,000 tonnes of salt a year.

The South Australian Government also wants \$50 million for the provision of low-interest loans to farmers on the Murray-Darling stem to help them improve irrigation systems and practices.

But the biggest investment sought is \$300 million for the Federal Government to provide grants to fund detailed investigation, design and construction of further salinity mitigation schemes.

This program will concentrate primarily on the interception of salt outflow caused by such river structures as dams and weirs and preventing salt inflow from tributaries.

Key Issue

The proposal will be a key issue at the summit meeting of the Federal and three State Governments at Wentworth, NSW, on July 17.

South Australia wants to initiate negotiations with the NSW, Victorian and South Australian Governments for a new River Murray Waters Agreement.

The scheme also calls for the three State Governments to order a moratorium on large-scale irrigation diversions until sufficient salinity mitigation works and measures are implemented or until their effect on salinity is shown to be acceptable.

Mr Tonkin said yesterday: "Right now, the future prosperity and well-being of more than one million Australians is threatened. This submission proposes a permanent solution to the problem.

"It's about time we got the Murray sorted out---this problem has plagued Australia since Federation."

The South Australian Government has sent a copy of the report outlining the package to the Prime Minister, Mr Fraser, the NSW Premier, Mr Wran, and Victoria's Premier, Mr Thompson.

Mr Tonkin said the cost of the scheme appeared formidable, but was reasonable when compared with other national projects such as the Snowy Mountains Scheme (\$3000 million).

CSO: 5000/7578

STATE OK FOR LIMITED MORETON SAND MINING STIRS UPROAR

6.4 Percent for Exploitation

Brisbane THE COURIER-MAIL in English 24 Jun 81 pp 1,10

[Excerpts] The State Government sparked a controversy yesterday with its decision to allow sand mining on 6.4 percent of Moreton Island.

The decision concludes with the release of a Griffith University survey showing 68.1 percent of people oppose mining on the island, and ignores the lobby conservationists.

It comes at a time of a world slump for mineral sands and has angered both conservationists and some government members.

The Liberal Member for Toowong, Mr Prentice, said last night he would move in the government joint parties meeting today to have the decision overturned.

Mr Prentice, who is against any mining, said the decision was a "sad" one and he would be studying parliamentary procedures to see if it could be stopped.

But the Premier Mr Bjelke-Petersen, defending the decision, said: "Moreton Island will be rehabilitated after the mining people have been there in such a way you won't recognise it."

The Queensland Chamber of Mines president, Mr Doug Trave, warned last night the State Government could face large compensation claims from some mining companies who will be asked to relinquish leases on the island under the 6.4 percent mining restriction of the decision.

Three companies now hold 16 leases covering more than 2000 hectares of 12 percent of the island.

Mr Bjelke-Petersen said the State Government would now establish two special advisory committees to formulate a strategy for the island's development.

One would develop mining strategy and the other would plan long-term management programs for the island. The aim was to preserve Moreton's important features.

Acceptance of the Cook report meant that 91.2 percent of the island, 28 kilometres off Brisbane, would be designated national park.

After allowing for mining, the remaining 2.4 percent would be allocated for other uses, including road construction.

Defending the limited sand mining decision, Mr Bjelke-Petersen said it would protect loose sand from being blown into the island's lakes.

Mr Bjelke-Petersen said the committee looking at long-term management would look at the "big threat" that unchecked tourism was causing.

Like Fraser Island, people were "tramping" all over the place, "running" (vehicles) over the dunes and "pushing" sand around.

Last night the State Opposition, which opposed any mining development, said the decision represented what it termed a "kick in the guts" for the Liberal Party.

The Deputy Opposition Leader, Mr D'Arcy, said that its supporters would be incensed by the agreement of Liberal ministers to mining.

Mr D'Arcy said the National Party, because it was not interested politically in the island, had ignored the likely consequences.

The Griffith University survey showed only 12.3 percent favoured limited mining, and 6.2 percent uncontrolled mining.

The survey, conducted in an area from the New South Wales border north to the Noosa Shire and went to the Great Dividing Range, was commissioned by the Queensland Conservation Council and carried out by the Griffith University Institute of Applied Social Research.

Queensland Labor Senator Colston has called for a referendum to decide the island's future. "Any sand mining on Moreton Island could only be described as environmental rape."

The area to be mined sounded small, he said, but it represented some of the most fragile sections of the island. "To expect that the beach will return to its original state is to believe in miracles," he said.

Moreton Island Protection Committee president, Mr Don Henry, said it was vital that the last unspoiled sand island in the Moreton region be left in its natural state.

"We don't have to take our mineral sands from a place like this," he said. There are other places. This is crazy."

Mr Henry said he had not given up hope. "We need to get enough people showing that they care. If they care for the island, they need to stand up and say it to the politicians."

Since the government decision was announced, he had received a constant stream of phonecalls in support of the cause. "And it's not just a small fraction of the community. It's the whole range," he said.

Decision Ramifications

[Editorial Report] Brisbane's THE COURIER-MAIL in English on 25 June 1981, page 1, and on 26 June, pages 1 and 2, under the rubric "The Moreton Sand Storm," carries articles on follow-up developments to the Queensland decision to allow sand mining on 6.4 percent of Moreton Island. The paper on 25 June notes that despite suggestions from some quarters, the Federal Government "would not interfere in the Moreton Island dispute by refusing export permits" for the mined sand. A related article describes the huge bank and insurance company interests that stand to benefit from any exploitation of Moreton's mineral sands. A front-page story on the 26th notes that Mineral Deposits Ltd. would build "barracks" for 150 mining employees on Moreton, once operations are set to get underway, in addition to other company facilities. Tentative plans for introduction of a bill in the Federal Parliament to prevent the export of Moreton minerals are described in a page 2 article.

Appeal to Prime Minister

Brisbane THE COURIER-MAIL in English 1 Jul 81 p 3

[Excerpts] The Brisbane City Council unanimously voted yesterday to call on the Prime Minister, Mr Fraser, to stop sand mining on Moreton Island.

He could do this by using powers under the Heritage Act, which lists the island on the Register of National Estate, or by refusing to grant export licences for sand mined there.

Petitions opposing mining will be placed in council ward offices and libraries, and these will be presented to State Parliament.

The document calls on Mr Fraser to "act in the best interests of the citizens of Brisbane to halt the exploitation of the island by sand mining."

The resolution was introduced by the Lord Mayor, Alderman Sleeman, during the council's weekly meeting yesterday and was adopted unopposed.

The petition calls on the State Government to declare immediately the whole of Moreton Island a national park, with the exception of towns, tourist resorts, airstrips and the lighthouse reserve.

CSO: 5000/7578

BRIEFS

SHALE WASTE STUDY--A team of chemical engineers at Queensland University has started work on a \$141,252 project to establish a data bank on the problems of waste disposal at Australian oil shale processing plants. Dr Peter Bell, a member of the team said it was important that future planning and costing be done on a basis of factual information. This was the role of the project which was being funded over a three-year period by the National Energy Research Development and Demonstration Council. Dr Bell said that processed oil shale could have an adverse effect on the environment, largely because organic and inorganic compounds it contained could enter streams and underground water resources. Rainwater could seep through the spent shale, leaching out and carrying down into the water table organic material which might be carcinogenic (cancer causing). There was also a possibility that ground water could rise and enter the shale heaps by capillary action, thus becoming polluted. The disposal of water naturally contained within the shale (approximately 4 percent) and released during the extraction process would also be looked at closely. The researchers have set up a mini-pilot plant in the university's department of chemical engineering, where they are extracting oil from samples of shale from the Rundle area. Dr Bell said the data which he and his colleagues were gathering should enable the adoption of extraction procedures which would be more cost effective and pose the least possible threat to the environment. [Text] [Brisbane THE COURIER-MAIL in English 30 Jun 81 p 18]

OIL SPILL FINE--An oil company was yesterday fined \$500 in connection with the spillage of about 6800 litres of petrol at Port Stanvac in South Australia last November. Mobil Oil Australia pleaded guilty in the Adelaide Magistrates Court to breaching the Prevention of Pollution to Waters by Oil Act. Mr B.M. Selway, prosecuting, said the spillage was caused by a severed oil hose on the vessel, the Mobile Acme. [Text] [Canberra THE AUSTRALIAN in English 2 Jul 81 p 26]

UNION DEVELOPMENT BAN--Brisbane--Queensland unions have banned any new development projects in Gladstone until essential community services catch up with the boom there. Meeting in Gladstone yesterday, more than 4000 blue-and-white collar unionists authorised the State Trades and Labor Council to review any future projects before agreeing to work on them. The decision could mean an abrupt end to the explosive expansion of Gladstone, which in recent years has won the reputation of being Australia's richest but most underprivileged resource town. Gladstone, 600 kilometres north of Brisbane, is the site of the world's largest alumina refinery and generates 45 per cent of the State's total electricity. It is also an important coal loading port and is further

expanded by the construction of a new aluminium smelter. In the past 10 years the population has increased by more than half, creating acute shortages of such essential services as schools, hospitals, homes and social services. The Queensland Government has become increasingly sensitive to criticism of the slap-dash ways Gladstone has been allowed to develop. In May this year Mr Bjelke-Petersen told THE AGE that mining companies would have to greatly increase their contributions to provision of State services if they wanted a share of Queensland's mineral wealth. [By David Broadbent] [Excerpts] [Melbourne THE AGE in English 2 Jul 81 p 5]

PARKS-FISHING CONFLICT--The Queensland Commercial Fishermen's Organisation is challenging the state national Parks and Wildlife Service over its declaration of some national parks. Their state chairman, Mr Dale Bryant, said yesterday the organisation was considering legal action. He said the decisions could wipe out commercial and amateur fishing along Queensland's coast. The declaration of a national park over 40 percent of Princess Charlotte Bay in north Queensland would affect the estuary fishing areas for barramundi by the park's protection of all forestry life, including fish. Mr Bryant said his 3000 strong organisation had the backing of the Amateur Fishing Council and its 20,000 members. It would attempt a challenge of the validity of the declaration of the national park in Princess Charlotte Bay. [Excerpts] [Brisbane THE COURIER-MAIL in English 3 Jul 81 p 9]

CHEMICALS MONITORING SYSTEM--A scheme to monitor the potential effects of new industrial chemicals on man and the environment will operate from October 1. The chemical industry will need to provide information on new chemicals either imported or manufactured in Australia. The information will then be collated and assessed by the Australian Environment Council's national advisory committee on chemicals. The State Minister for Conservation and the Environment, Mr Masters, who is chairman of the council, said that the new scheme would be a major step in a national plan on hazardous chemicals. The AEC also adopted a new policy as a guide to reduce cadmium emissions from industrial plants. All users of cadmium will be asked to encourage a minimum discharge by using more efficient recovery technology. [Excerpts] [Perth THE WEST AUSTRALIAN in English 4 Jul 81 p 34]

PCB DISPOSAL PROBLEM--Thousands of litres of lethal industrial oils are being held under tight security in Perth till a way is found for their disposal. The oils--polychlorinated biphenyls (PCBs)--have been used widely in the electrical industry for decades, but since 1960 have been found to be health and environmental hazards. A WA firm recently began disposing of the PCBs for the mining industry through a 1300C furnace, but one of the biggest holders of the oils, the State Energy Commission, is not satisfied with the process. The SEC is holding 3600 litres of PCBs in an impervious concrete pit inside a locked building surrounded by a security fence. Only three SEC officers can authorise entry to the building--south of Perth--and THE WEST AUSTRALIAN was yesterday refused permission to visit the site. Elsewhere the PCBs are transported in lined drums and stored in commercial toxic-waste stores. A spokesman for Hamersley Iron said that the company had converted all but one of its transfers to non-toxic materials. [By Paul McGeough] [Excerpt] [Perth THE WEST AUSTRALIAN in English 4 Jul 81 p 10]

REGULATIONS SET TARGET DATES ON EFFLUENT DISCHARGE LIMITS

Islamabad THE MUSLIM in English 30 Jun 81 p 1

[Article by Li Shui Hua]

[Text]

MALAYSIA'S two most polluting industries also happen to be among the most important—palm oil and rubber. About two million pounds or 900 tons of organic effluent are discharged into the nation's rivers daily and half of it comes from palm oil mills and rubber processing factories. Sewage accounts for the other half.

Progress is, however, being made in reducing pollution, wholly due to Government prodding in the form of regulations. These regulations aim at reducing pollution progressively by establishing limits on the discharge of effluents.

Because of the importance of the palm oil and rubber industries, great care was taken in the formulation of standards, says A. Maheswaran, director of the Water Pollution Control Division.

TARGET DATES

"These standards have not only to be effective in protecting the environment but also feasible within the framework of economically feasible technology available to these

industries today," he says. Target dates are set for the progressive reduction of discharges.

There are 149 palm oil mills and more than 450 rubber processing factories in Malaysia. The Ministry of Science, Technology and Environment estimates that the palm oil mills generate more than 10,000 tons of waste a day containing a biochemical oxygen load or biological oxygen demand (BOD) of 210 tons daily.

The BOD is an index of pollution which determines the detrimental effect of discharging effluent into a stream. It represents the quantity of oxygen absorbed by the effluent when it enters the water resulting often in a deficiency which kills fish and other marine life.

About 80 per cent of the palm oil mills have installed effluent treatment plants; others are in the process of setting them up. The Government expects that palm oil production will be double the 1980 level in five years, resulting in a corresponding rise in waste and BOD.

Rubber processing factories presently generate a total BOD load of 230 tons a day. By 1985, the Government estimates that the rubber and palm oil industries together will spew forth a combined BOD equivalent to domestic sewage from a population of 15 million.

"This highlights the dangers ahead considering that the effluent currently discharged from these two industries is already polluting some 38 rivers throughout the country. Some of these rivers are sources of drinking water supply," says Mr Maheswaran.

There was considerable public outcry recently when the drinking water supply of Batu Pahat, a small town in the southern state of Johore, was contaminated by waste from a palm oil mill.

S.T. Sundram, Director General of Environment, says that the cost of installing effluent treatment plants range from M\$450,000 (U.S. \$ 205,000) for a mill of 20-ton capacity to more than M\$1 million (U.S. \$455,000) for a 60-ton mill. FELDA, the Government's land development authority, has spent roughly M\$30 million (U.S. \$ 14 million) for effluent treatment facilities in its 22 palm oil mills.

Big plantation houses like Sime Darby and Harrisons and Crosfields (HAC) have allocated large sums to work on pollution control in research labs situated in the plantations. Sime Darby has spent about M\$5 million (U.S. \$ 2.2 million) in the last five years while HAC has invested M\$6 million (U.S. \$ 2.7 million) over the last three.

While pollution control equipment is being installed solely out of the need to comply with government regulations, the larger and more resourceful companies are making efforts to derive "productive" benefits from the outlay. These efforts are all still at the experimental stage.

Only one plantation company—Sime Darby—is using, on a trial basis, the methane gas generated by treating palm oil effluent for drying rubber sheets. A spokesman of its research department said the process is only feasible where rubber is being cultivated near the mills.

Other plantation houses, including Guthrie and Kuala Lumpur Kepong, are using treated effluent as fertilizer for oil palms. Guthrie says the effluent replaces, to a certain extent, the inorganic fertilizer needed, and this results in some cost savings for the company.

The savings in fertilizer cost, however, are unlikely to be dramatic. According to government sources, the effluent from a 60-ton mill is sufficient to fertilize only about 100 acres of oil palm. Guthrie also expects the yield from the trees to increase due to the irrigation effect of the effluent-fertilizer.

ANIMAL FEED

A few companies are also producing animal feed from the treated waste but, on the whole, palm oil and rubber mills are merely treating and discharging the waste.

Mr Sundram maintains that the installation of effluent treatment plants should not be looked at from the aspect of costs and benefits to the company.

He says, "Until the introduction and enforcement of environment laws, these companies have been externalizing the cost of their pollution—they have made the public pay in terms of a dirtier environment. If they are able to recoup some of their costs in installing

waste treatment plants, so much the better. But the major benefit, of course, is and should be, society.

He thinks that much progress has been made in reducing pollution from the two major sources even though there were few guidelines available from other countries to go by. Malaysia has had, more or less, to work its way from scratch in adopting effluent technology developed in the US and other countries.

Mills are required to send quarterly reports on their BOD discharges. In addition to twice yearly visits to the mills by government officials, spot checks are carried out, he says.

The Environment Quality Act, 1974, provides the Government with broad powers to protect and enhance the environment. In the case of mill effluent, control is exercised through the issue of an operating licence to which conditions are attached for meeting target dates for reducing BOD levels. This is the essence of the Government's policy of regulation in gradual steps because of the technological difficulties faced by the mills. A three-step set of standards was evolved for rubber mills while a four-step one was formulated for palm oil mills.

During the first year of implementation, palm oil mills were allowed, due to technological difficulties, to discharge effluents with BOD greater than the permitted level of 5,000 parts per million (ppm). But fees were charged according to the BOD concentration of the effluent.

About M\$ 2.5 million (US \$1.2 million) was collected in fees during the first year. During the second year, it became mandatory for mills to bring their BOD levels down to 2,000 ppm. In the final phase which begins this July, mills will have to reduce BOD levels to 500 ppm.

Mr Maheswaran contends that the charging of the high pollution fees, as well as the granting of the

incentive of a waiver of pollution fees for research and development on effluent treatment technology, has actually expedited the pace of research. "Some breakthrough has been achieved in effluent treatment technology," he says.

The standards, however, based purely on the technology available, are still far from satisfactory from the water quality point of view. The Government is thus working out a further set of target dates to move to optimum standards. These will be based on the quality of water needed for public consumption, marine life, irrigation and industrial water supply.

PUBLIC RESISTANCE

Mr Maheswaran laments that the benefits of environmental regulation are often not as clearly seen or appreciated by the public as the costs involved. Public resistance towards the use of more funds for protecting and improving the environment seems to be growing, with economic arguments put forward about inflation, the energy crisis, unemployment and poverty, he says.

He feels there is an urgent need for systematic studies which show clearly and quantitatively the benefits of environmental protection measures. Environment protection, he feels, should be integrated with economic planning. Resource management should be considered together with resource use.

But the Government seems to have neglected the environmental aspect in its economic planning altogether. In the nation's newest Five-Year Plan launched earlier in April, only a passing mention is made of the environment. In contrast, the preceding third plan had devoted a whole chapter to environmental considerations in development. —The *Muslim-Depot* News Service

PHILIPPINES

TREES PLANTED TO OFFSET MANILA POLLUTION

Manila BULLETIN TODAY in English 16 Jul 81 pp 1, 8

[Article by Brenda P. Tuazon]

[Text.] The First Lady and Minister of Human Settlements Imelda R. Marcos called for a massive tree-planting program yesterday to improve the oxygen content of the air.

Added benefits here would be the beautification of the metropolis and the earning of added income by the people, she said.

Her plan calls for the planting of 64 million trees in Metro Manila, creating forests out of idle government land and surrounding the metropolis with an "oxygen belt" of forest farms.

Metro Manila could then be a model for the rest of the country to follow.

In a meeting with representatives of government and the private sector, she said that the present metropolitan ratio of three trees to one person should be increased to 8:1.

She appealed for support from the private sector, particularly the Jaycees, Lions, Rotarians, and Kiwanians.

On the government front, school supervisors and teachers will take up the brunt of the tree-planting effort, teaching the young to plant trees as their "investment for the future."

Every effort will be made to make tree planting look "fashionable and glamorous," stressing the value of trees as the source of life.

The First Lady said that the need for trees becomes even more pressing as the country begins converting to gasifier motors to power vehicles, boats and irrigation systems.

She said that as the great forests of the world are being depleted, the world slowly begins to suffocate. She said that the only great forests remaining are the rain forests of Africa, the Amazon in South America and some forests in Southeast Asia.

To broaden public participation, the First Lady set a bigger meeting next Wednesday in Malacanang to which heads of social clubs would be invited.

PESTICIDES CAUSE SERIOUS AGRICULTURAL POLLUTION

Taipei CHINA POST in English 16 Jul 81 p 12

[Text]

Participants in the economics discussion group of the National Development Seminar yesterday suggested that a pesticide research organization and an environmental

protection bureau be set up to cope with the growing agricultural pollution and disasters caused by the use of pesticide.

William Y. B. Chang, an ecology lecturer of Indian State University indicated that the color of great parts of Taiwan coastal waters is black or grey, reflecting serious water pollution in rivers.

Leader of the fishery department of the Council for Agricultural Planning and Development Yuan Po-wei refuted a belief prevailing in industrial circles that waste water will cause no harm if discharged in the sea.

They suggested that a comprehensive system to assess environmental pollution and to set improvement goals for every two years be established for a tentative period of ten years.

All delegates agreed that more attention be placed on ecological changes, generation of creatures' anti-pesticide strength, and pollution caused by the use of pesticide.

A special committee is needed to strengthen research and development of low-toxic pesticide, one delegate said.

They also asked the government to work out a system to prevent farmers from selling crops cultivated with high-toxic pesticide to customers while keeping those raised with low-toxic pesticide for themselves.

Meanwhile, the Anti-Water Pollution Center is conducting a meeting on electroplating waste water.

It is believed that 84 percent of all electroplating factories in this country dump their toxic water untreated, polluting water resources and consequently causing damage to fish, crops, and humans.

HIGH LEVEL OF CHEMICAL CONTAMINANTS IN FOOD

Kuala Lumpur BUSINESS TIMES in English 6 Jun 81 p 7

[Article by Wirasak Salayakanond in Bangkok]

[Text]

DR PRAYOON Deemar is an avid visitor of this city's marketplaces, but he is far from being an enthusiastic customer.

"Pick any vegetable or fish from your local market and I can tell you that there is a large percentage of pesticide or poisonous chemicals in them," says Dr Prayoon of the Poisonous Materials Research Division of the Agricultural Technical Department, Ministry of Agriculture and Cooperatives.

Dr Prayoon has been campaigning against the excessive use of pesticides and chemicals for agriculture which he says can be more detrimental to the environment and human health than beneficial in increasing production.

"I am not against the proper use of pesticides and chemicals for agriculture, but I am against their excessive use which affects the environment and is harmful to human lives," Dr Prayoon said.

His extensive surveys of five major markets in Bangkok — Wongwianyai, Prannok, Bangsue, Pra Kanong and Sapanmai — have found a large number of pesticide or insecticide residues in more than 40 per cent of the vegetables for sale. "These vegetables look fresh and good, but beware of chemical contamination," he warns.

In 76 out of 105 samples

of rice and flour were found residues of chemical pesticides.

Surprisingly, Dr Prayoon points out, even with such extensive use of pesticides to kill crop pests, the total loss is still at the same level every year. Post-harvest loss accounts for 35 per cent while the pre-harvest loss is 20 per cent. In effect, what pesticides can do is only to keep the loss from expanding further.

Dr Prayoon says that he found pesticides or insecticides contamination in almost every kind of freshwater fish, including catfish, murrel, dace, crawling fish and the like. "The Thais are fish eaters, and it is possible that their lives are in danger if they eat contaminated ones," he says.

More horrifying was that all 110 samples of chicken meat, pork, beef

and duck meat contained certain forms of chemicals. "This was quite possible because when we checked samples of animal feeds, we found that 45 out of 48 samples had dangerous levels of chemical contamination," Dr Prayoon explains.

Scientists say not less than 41,000 million pounds of pesticides is used globally every year, to kill insects, protect crops against pests and for other purposes. Each person on the average uses one pound of such dangerous chemicals per year.

In Thailand, more than 100 kinds of dangerous chemicals are mixed by various formulas to produce over 1,000 brands of pesticides. Over 60 per cent of these are used in agriculture.

The main reason in such extensive use of pesticides in farming is to increase production. The primary enemies of crops are insects, rodents, plant diseases and weeds.

Dr Prayoon says: "These plant enemies which multiply rapidly are responsible for the pre- and post-harvest destruction of Thailand's major crops, namely, rice, maize, beans, vegetables, sugarcane, tapioca, rubber, and fruits, at an approximate value of 100,000 million baht (US\$4,926 million).

"Thai farmers or even agricultural scientists are much more interested in using pesticides to protect their production than giving heed to the devastating effects of pesticides."

Surprisingly, as Dr Prayoon points out, pesticides can only keep the loss from expanding further. Whether it is worth applying pesticides to kill diseases and insects in order to increase agricultural production is still being debated.

"Some scientists calculate that pesticide use will help boost prod-

uction up by three times, but it needs to spend half of the gain to clean the environment from pesticides deposited in soil, water and air, not to mention about the harmful effects for animals and human beings," Dr Prayoon says.

It is difficult to estimate how many people have been killed by excessive pesticide contamination. The World Health Organisation estimates that about 500,000 people — mostly farmers and agriculturists — in developing countries die of pesticide poisoning every year.

The United Nations Environment Programme (UNEP) described pesticide as one of the four heavy environmental pollutants last year. It said: "When carelessly applied, chemical pesticides can result in acute and long-term side effects including sickness and death of people, useful animals, fish and birds, and destruction of crops."

As for Dr Prayoon, he insists: "It is necessary for the government to start paying more attention to the side effects of chemical pesticides and the new developments in their uses. Scientists as well as government agriculture officials should work together to educate farmers and consumers to minimise the danger of pesticides." — Dep. Thews Asia

IDB TO LOAN \$4 MILLION FOR SOIL IMPROVEMENT SCHEME

Bridgetown ADVOCATE-NEWS in English 26 Jun 81 p 1

[Text] Barbados' Scotland District Development programme took a closer step in becoming a reality with the approval of more than US\$4 million from the Inter-American Development Bank (IDB) to assist in the undertaking.

The IDB announced yesterday that it had approved a US\$4,445,000 loan to assist the Barbados Government in stemming soil erosion in the rugged Scotland District.

The project to be undertaken by the Soil Conservation Unit of the Ministry of Agriculture, Food and Consumer Affairs, involves a series of conservation research works, including reshaping and terracing the land.

In addition, seven water courses will be established, and about 30 kilometres of Hillside Ditches will be constructed to reduce slopes between the terraces.

Other activities include a massive re-afforestation programme, using sugar canes, fruit trees and forest cover legumes, and engineering works, to conserve soil and increase productivity.

The activities will be carried out on Government-owned estates and programmes will also be carried out in the district to collect and analyse soils and hydrological data.

The programme is Government's biggest step in stabilising the area which has been the scene of numerous landslides, and the collapsing of bridges especially after a downpour.

In the past, successive Barbados Governments have been forced to erect dams, bridges and implement new drainage systems as part of the efforts in the stabilisation programme.

Some residents have also had to resited from the area.

The Scotland District encompasses an area of about 6000 hectares, approximately one-sixth of which is owned by Government.

The IDB said that the Soil Conservation Unit will be obtaining the services of a specialised institution which will provide advice on engineering machinery maintenance, and the conducting of training exercises.

"An international accounting and management firm will provide the cost accounting, financing and management information system which will be used to monitor and evaluate the results of the project," the IDB declared.

The total cost of the project is estimated at US\$5.8 million, of which the IDB loan will cover 77 per cent.

The loan will be repaid over a 20-year period in semi-annual installments, the first of which will be due six months after the scheduled date for the last disbursement of the financing, the bank added.

CSO: 5000/7579

GOVERNMENT TO PROVIDE WATER TO ALL VILLAGES BY 1986

Gaborone DAILY NEWS in English 29 Jun 81 p 1

[Article by Solomon Lotshe]

[Text] "THE GOVERNMENT is aiming at providing adequate water supply in all villages throughout the country by the year 1986," the Minister of Mineral Resources and Water Affairs, Dr Gaositiwe Chiepe said when addressing kgotla meetings in the Nkanga and North East constituencies.

Dr Chiepe added that water was a major backbone towards human survival and nothing could live without water.

She said that an agreement was reached at the United Nations meeting that the decade 1981 to 1990 should be a target period for all countries to provide adequate, safe drinking water and sound sanitation system.

Dr Chiepe said that according to the government's programme Botswana was well ahead of the target period.

She however, expressed concern that in many villages a number of boreholes were drilled but no water was found.

On the mining industry, Dr Chiepe said that the Botswana's economy was based mainly on mineral resources.

She explained that profits received from the sale of minerals enabled the government to carry

out development throughout the country.

On health care, the Minister said that health was a basic human right, and a world-wide goal of health for all by the year 2000 had been set.

She explained that in order to carry out its strategy of primary health care the Ministry of Health was emphasising the importance of its training programme.

Dr Chiepe also encouraged people to prepare for the coming population census. BOPA

BOTSWANA

BRIEFS

RAINS END DROUGHT--Botswana has now been declared drought-free following the good rains during the past rainy season. All drought relief measures which were undertaken when the country was declared 'drought-stricken' last year, will be stopped by the beginning of July this year. A release from the Ministry of Finance and Development Planning issued last week states: "At a meeting of Cabinet on June 10 it was decided that as a result of the good rains those areas that have been suffering from drought over the past year, this is, Ngamiland, Chobe, and the Boteti and Bobirwa areas of Central District, should now be declared drought free. Accordingly all drought relief activities will be brought to an end by the 1st July. However, as restriction on the sale of cattle from Bobirwa have been in force since mid 1979 and will continue for at least the next five months, the 50 pula scheme will be continued in this area until further notice. The restriction on sales are due to the threat of Food and Mouth Disease from Zimbabwe. [Text] [Gaborone DAILY NEWS in English 15 Jun 81 p 1]

CSO: 5000/5035

DROUGHT DIFFICULTIES, MEASURES REPORTED

Kaduna NEW NIGERIAN in English 1 Jul 81 p 13

[Text] Drought scourge is seriously threatening the growth of crops and animals in Filani and Tangaza local government areas of Sokoto State.

An investigation conducted by the New Nigerian revealed that almost all the crops planted in those areas have wilted.

Similarly, cows and other domestic animals in the affected areas have started showing visible effect of the drought on their flesh.

When the New Nigerian visited Turidi, Kalanti, Gidamadi, Tangaza and Birji, the crops planted in those areas have dried up while some farmers were yet to start weeding their farms.

Two of the three farmers interviewed said only one rainfall was recorded in their area, while the other reported that his area had two rainfalls so far.

When contacted, the sole administrator of the Filani local government, Alhaji Bello Yahaya, told the New Nigerian that the drought in the area mentioned was "partial". He said that the northern and the south western part of the Filani local government was more seriously affected by the drought.

He said his office had so far received drought report from Gande, Shiro, Golitto, Filani, Kusodu and Karau.

Alhaji Bello said cattle rearers had also complained about the welfare of cattle in those areas.

He disclosed that the local government had supplied drugs worth 7,000 Naira and relief materials to the three veterinary centres in Filani, Binji and Gande for treatment of the cattle.

He said already, the state government had started sending relief materials like rice, millet and guinea-corn which were sold to the inhabitants of the area at subsidised rates.

Contacted, the state Commissioner for Agriculture and Natural Resources, Alhaji Haruna Mafara attributed the drought to the sporadic wind which usually hit the area.

The commissioner added that, the state government would soon embark on tree planting campaign in the area with a view to containing the situation.

Alhaji Haruna however, said the state government might not be able to succeed without adequate publicity on the importance of the exercise to the people.

CSO: 5000/5040

FLOODS REPORTED CAUSING DAMAGE, DEATHS

Traders Driven Out

Lagos DAILY TIMES in English 29 Jun 81 p 41

[Excerpt] Floods have now chased out traders at the Jankara Market in the heart of Lagos Island and in a "I-don't-care" attitude, the Lagos State Island Local Government announced an increase in rents of the submerged stalls from N1.00 to N5.00.

At the moment, the traders are busily fighting the floods in rain boots hoping to take on the state government after defeating the invading floods.

Railway Blamed for Deaths

Lagos DAILY TIMES in English 30 Jun 81 p 5

[Excerpt] A member in the Lagos State House of Assembly, Chief Samuel Alawode has blamed the week-end flood disaster in Agege on the Nigerian Railway Corporation.

Two persons were reportedly killed and thousands were rendered homeless when a torrential rain swept through the area.

Chief Alawode said during a motion for adjournment that if the Railway had built a proper bridge instead of the two narrow culverts, the disaster might have been averted.

"The two culverts were also swept away by the rains," he added.

Chief Alawode also wanted the House to discuss with the management of Guinness, measures for the proper drainage of liquid industrial waste from the factory, because as he claimed, the liquid waste had been identified as one of the major causes of flooding in some areas of the industrial estate.

CSO: 5000/5038

BRIEFS

COOPERATION WITH FRANCE--Paris, July 11--France and Nigeria have agreed to cooperate closely on environment problems, officials said here yesterday following a four-day visit by Nigerian Housing and Environment Minister Wahab Dosunmu. During his stay as guest of French Environment Minister Michel Crepeau, Mr Dosunmu toured several anti-pollution research organisations, including an experimental centre on control of water pollution in Brest, North-West France. Nigeria, which is Africa's major oil producer and exporter, is particularly interested in techniques to control oil spills, which have created social and environment problems in the oil-producing rivers and creeks area of Southern Nigeria. As a result of Mr Dosunmu's talks here, Nigerian specialists are likely to be trained in France on pollution control techniques.(AFP) [Text] [Paris AFRICA AFP in English No 2809, 10 Jul 81 p 18]

TREE PLANTING--The Agric Department of the Saminaka Local Government has developed 25,000 tree seedlings for planting in the local government area this year. Speaking during the launching of tree planting, the Councillor for Agriculture of the local government, Mr. Jacob Noma, said out of the total number of the trees, 2,500 would be planted in the forestry reserve at Kudara. He said schools and other government institutions, including companies in the area, had already been told to collect their shares of the trees. He also indicated that the remaining trees would be distributed to farmers in the area for planting on their farms. Earlier, the head of agric department, Malam Yusufu Yahaya, had expressed his appreciation for the activities of the Forestry Unit in his department. He said revenue derived from forest in the 1979 fiscal year amounted to 32,642.64 Naira, while that of 1980 period was 33,067.13 Naira. He, therefore, anticipated more revenue in the current year. Malam Yusufu urged people to plant trees not only for economic reasons but also for protection against the hazard of drought and erosion. He warned people to stop indiscriminate burning of forest. [Text] [Kaduna NEW NIGERIAN in English 11 Jul 81 p 14]

OIL SPILLAGE--The Rivers State Chairman of the National Emergency Relief Agency, Mr Dagbo Alazigha has expressed dissatisfaction at the uncompromising attitude of the Shell Petroleum Company to the People of Bodo West over the recent oil spillage in the area. He made the remark at Bodo West recently while inspecting the blow-out area with members of the Relief Agency. [Text] [Lagos DAILY TIMES in English 7 Jul 81 p 31]

BRIEFS

DUST, STONE PARTICLES POLLUTION--Meanwhile, a number of mothers have been telephoning the Daily News complaining that stonecrashing work undertaken by Kajima in the city area near St. Peter's Church was threatening the health of the people, especially children. The housewives said that the dust coming out of the works was getting into their houses as well as the church and primary school nearby. In this way they feared children were exposed to dangerous diseases that could result from inhaling the dust containing fine particles of stone. [Excerpt] [Dar es Salaam DAILY NEWS in English 10 Jul 81 p 3]

CSO: 5000/5042

ESKIMOS UNITE AGAINST CANADIAN TANKER ROUTE PLAN

Godthaab GRØNLANDSPOSTEN in Danish 25 Jun 81 p 14

[Article by L.I.P.]

[Text] "Supertankers that break up the ice and destroy the fishing routes? Surely that is no problem for a dyed-in-the-wool Eskimo. Here are some suggestions."

That was not exactly said, but that was the idea behind a number of suggestions that the Canadian state oil company Petro-Canada made to the Canadian Eskimos.

Petro-Canada stands behind the APP [Arctic Pilot Project], and at a recent meeting in Resolute Bay on one of the arctic islands the company made about a dozen suggestions. All of the suggestions were supposed to solve the problems connected with the fact that the supertankers break up the ice and isolate a number of settlements from their fishing areas.

Hans-Pavia Rosing, president of the ICC [expansion unknown], took part in the meeting, and he tells AG [GRØNLANDSPOSTEN] that although it is hard to understand, the suggestions were presented quite seriously to the assembled representatives of all the Eskimo settlements in Canada that are directly affected by the supertankers.

"We learned that they had selected the best suggestions of a total of more than a hundred suggestions received in a contest," Hans-Pavia Rosing tells AG.

"The drawings speak for themselves," the president continues, "but they say something very disturbing about how condescendingly the APP originators of them view our fishing culture."

Eskimo Unity

It was also evident at the Eskimo meeting in Resolute Bay that there is a united front among the Eskimos in the Northwest Passage against its navigation by supertankers.

"The people of all the settlements along the planned supertanker route are against the project," Hans-Pavia Rosing, president of the ICC, says in a press release from the ICC secretariat in Nuuk.

"It was confirmed at the meeting that the inhabitants along the supertanker route are definitely opposed to the route, and they are backed up by their regional and national Eskimo organizations," says Hans-Pavia Rosing.

Hans-Pavia Rosing told the participants in the meeting about the Greenland opposition, and the meeting thus confirmed that a united Eskimo front exists against the plans to send supertankers through the Davis Strait and the Northwest Passage. At the meeting it was also documented that there can be no question of supertankers that would carry natural gas. The oil company Dome Petroleum has applied to the Canadian authorities for permission to carry oil.

"We have long suspected that they would want ship oil by tanker," Hans-Pavia Rosing concludes. "Now the suspicion has been confirmed, and the only thing left is to continue to emphasize the necessity of not allowing a single supertanker to navigate those waters."



Suggestion from Petro-Canada: If the Eskimos think there is a problem, that the supertankers will break up the ice, they can simply always have a canoe with them--a canoe big enough to have snow scooters aboard. There can also be enough Eskimos that they can manage to lift the snow scooters into the canoe.

CANADIAN SIDE OFFERS NEW GREENLAND TANKER ROUTE PLAN

Godthaab GRØNLANDSPOSTEN in Danish 25 Jun 81 p 16

[Article by H.]

[Text] According to the new proposal the gas tankers will sail at a distance of about 100 km from the west coast of Greenland instead of the 40 km proposed earlier.

At the latest meeting of the Danish-Canadian study group on the Arctic Pilot Project the Canadian side presented a new proposal for the routing of the big tankers that will transport gas in liquid form from the fields off Melville Island in the northernmost part of Canada to Newfoundland. The new route is ca. 100 km from Disko Island at the closest point. According to the earlier route proposal the ships would pass the west coast of Greenland at a distance of only 40 km.

"But we were unable on the Danish side to concede that the new route is more satisfactory than the earlier proposal," a member of the group, the marine biologist Poul Johansen of the Greenland fisheries research service, told AG [GRØNLANDSPOSTEN]. "It all depends on where the fish and marine mammals are. Theoretically a line 100 km from the coast may be more damaging than closer to the coast. It takes extensive study of the channel in question before one can say what route will do the least damage," says Poul Johansen.

Noise Problems

At the meeting, which was held in Copenhagen at the end of May, one of the chief subjects was the noise from the tankers. "There was disagreement in the group on what noise level the ships will produce and what harm it will do to the animal life," says Poul Johansen.

"On the Canadian side the main point of view is that these environmental questions can only be answered in connection with the comprehensive research programs connected with the APP [Arctic Pilot Project]. It is believed in advance that the marine animals will quickly accustom themselves to the noise from the ships.

"On the Danish side we are not convinced of APP's character as a real research project, and we want comprehensive studies carried out before we can think of accepting the starting of the APP. With regard to the effect of noise on the animal life, we refer to Japanese and other studies. And they indicate that the animal



Here is a sketch of the new route proposed for the APP supertankers. The proposal was presented at the latest meeting of the APP study group in Copenhagen late in May. The closest point to the west coast of Greenland is the route past Disko Island, where the distance in the new proposal is about 100 km.

life is substantially reduced in ocean areas with dense ship traffic. We want researches on noise conditions in Greenland waters before the APP is set in motion," Poul Johansen adds.

Next Meeting in September

Results of a winter study of the marine mammals' habitat in the pack ice between Canada and Greenland were available at the meeting. The study was done by overflights. It particularly shows the preferred habitats of the narwhals and white whales.

The next meeting of the study group will be held in September in Toronto, Canada.

CAMPAIGN AGAINST LITTER REPORTED

Nicosia CYPRUS MAIL in English 3 Jul 81 p 1

[Text] Cyprus Friends of the Earth (the environment protection group), concerned about the increasing litter problem, have written to one of the island's biggest soft drink firms, SunIsland Canning, to ask them either to market their product in returnable bottles or to supply them in a biodegradable (natural decomposition) containers.

In the group's fourth newsletter members' anxiety about littering was reported to have been expressed at local meetings in Nicosia and Limassol. It was at the Limassol meeting that the approach to SunIsland Canning and a sponsored clean-up, possibly of the Yermasoyia Dam area, were proposed.

Friends of the Earth also asked the company to provide a number of litter bins and to include a "Keep Cyprus clean" motif in their advertising.

The group are awaiting a reply from the company.

Among other plans, the group intend to produce their own anti-litter posters, using a graphics idea from a pupil at Foley's Grammar School, Limassol. It will be worded in Greek although if costs permit, an English edition will also be made.

The Friends are also considering making a "public information"-type anti-litter commercial for television, counting on members "donating" their relevant skills.

The newsletter goes on to report publicity for the "Adopt a turtle" scheme but comments on a disappointing reaction from Cypriot children.

The bulletin pledges continuance of lobbying the government of Cyprus on a number of environmental issues.

It also refers to the "environmental bill" which the Friends sent to each of the political parties after the recent elections, requesting that they plant a number of trees to replace the 55 R.O. tons of paper which Friends of the Earth allege were used in the form of posters. The Friends allege that this tonnage equates to "a small forest" of 935 trees. (All Friends of the Earth communications are printed on re-cycled paper).

Finally, the group report letters of support from FoE groups as far afield as Japan.

CSO: 5000/5545

TWELVE TOWNS REPORTEDLY DANGEROUSLY POLLUTED

Istanbul MILLIYET in Turkish 9 Jun 81 p 3

[Article by Abdullah Ogulmus]

[Text] Environmental pollution has reached very dangerous proportions in 12 cities and 1 district in Turkey. Engin Ural, general secretary of the Turkish Environmental Problems Foundation, said, "It has become critical for people in residential districts where air, water, soil, noise and traffic pollution have reached the saturation point. People are falling ill en masse."

According to the Environmental Problems Foundation, saturation points have been reached in noise, water, air and traffic pollution in Istanbul; noise, water and traffic pollution in Izmit; noise, water and traffic pollution in Izmir; noise, air and traffic pollution in Ankara; water and air pollution in Eskisehir; water pollution in Kutahya; water pollution in Burdur; noise, soil and traffic pollution in Adana; soil pollution in Mersin and Tarsus; air pollution in Erzurum; and water pollution in Trabzon and Samsun.

Environmental Problems Foundation General Secretary Engin Ural pointed out that "it is necessary to find a balance immediately between efforts to protect the environment and the tempo of Turkey's industrialization and urbanization" and said the following: "If we put off systematic, planned steps to save the environment, we will see very soon that remedies will be very difficult and expensive, that the consequences of environmental problems will be very painful. This situation can vastly complicate our social and economic life."

Noise, water, air, soil and traffic pollution cause digestive and nervous disorders, heart and respiratory illness and sexual dysfunction. Environmental problems also lower production in all sectors, causing great loss of output. People are not happy in areas where such environmental problems reach the saturation point.



(1)
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According to the map prepared by the Turkish Environmental Problems Foundation showing polluted areas, noise, water, air and soil pollution are at the saturation point in Istanbul, Izmit, Izmir, Adana, Ankara, Eskisehir, Erzurum, Denizli, Kutahya, Tranzon, Samsun, Tarsus, Mersin and Burdur.

Key:

- | | |
|--------------------|-------------------------------|
| 1. Noise pollution | 4. Traffic congestion |
| 2. Water pollution | 5. Soil quality deterioration |
| 3. Air pollution | |

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